Homestake Mining Company Superfund Site:
Community Update

Community Information Meeting
Grants, New Mexico
November 17, 2016

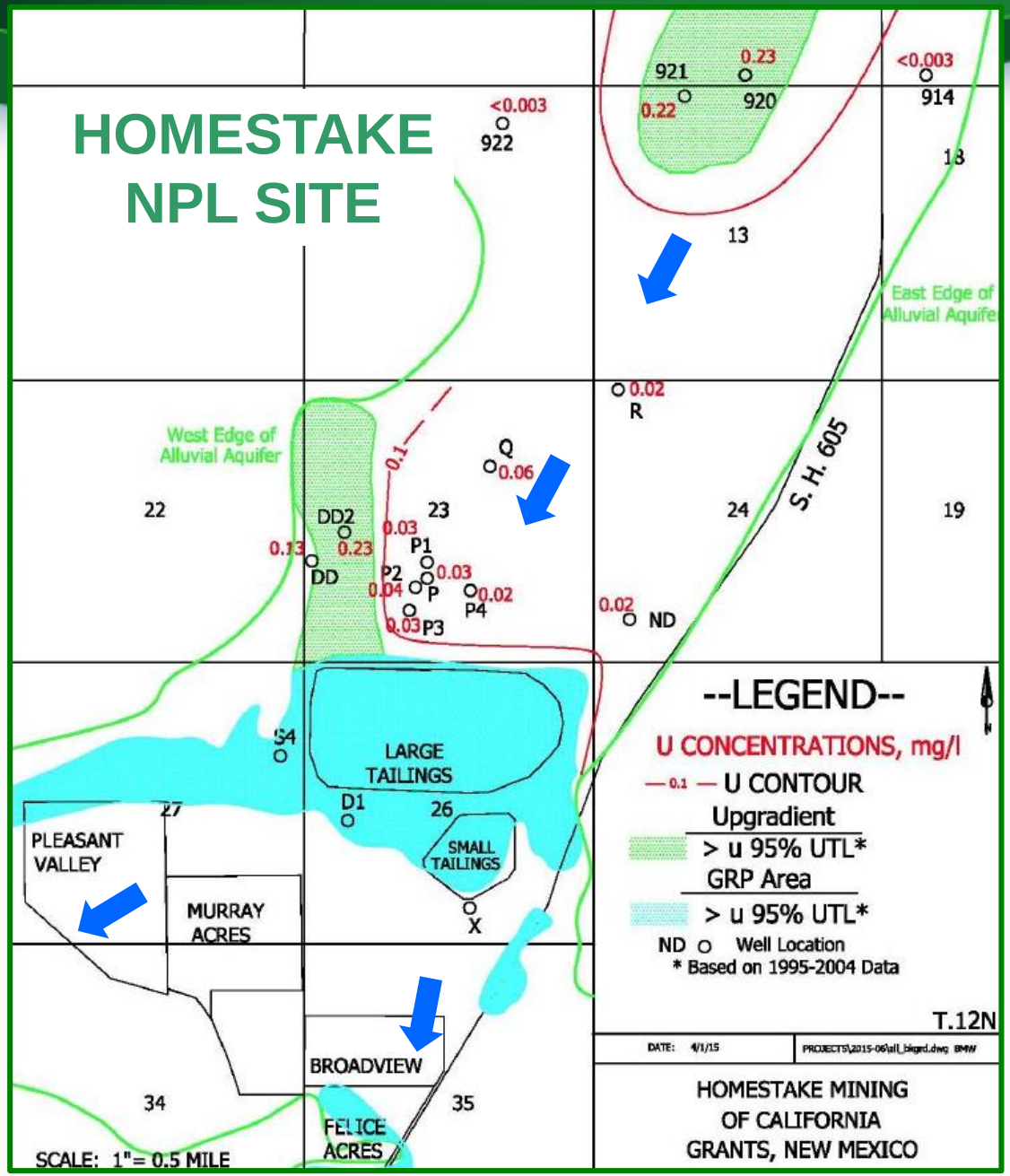
9881389

Update Topics

- EPA Groundwater Assessment
- Fourth Five-Year Review

EPA Groundwater Assessment

- Requested by BVDA/MASE
  - Provided EPA with new information
  - Dr. Meyers Report on conceptual flow and transport model
- Verify if approved cleanup levels are appropriate
  - Levels based on background
  - Higher than drinking water standards
- U.S. Geological Survey (USGS) Support
  - Determine source of high background levels



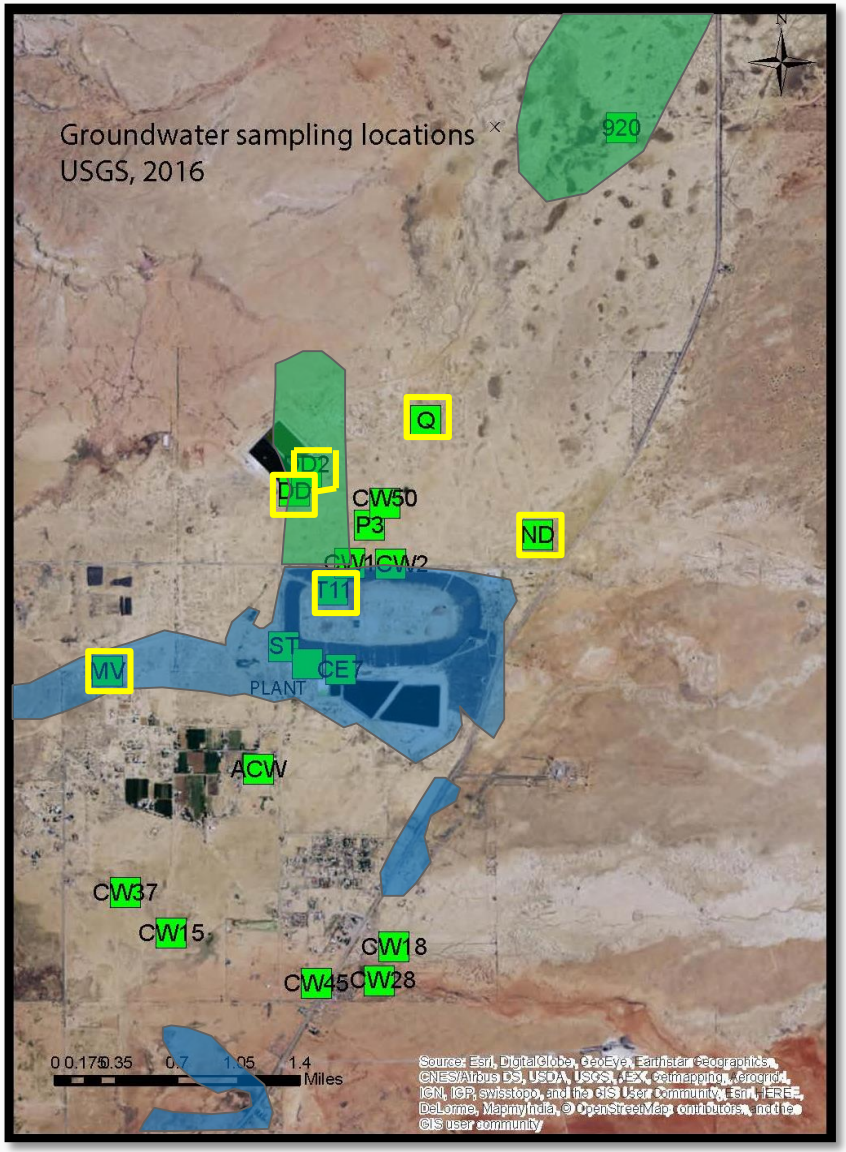
HIGH URANIUM LEVELS IN ALLUVIAL GROUND WATER UPGRADIENT OF HOMESTAKE

Site Related Uranium Impacts

Upgradient Uranium

Ground Water Flow Direction

USGS Geophysical Testing and Ground Water Sampling Locations



Ground water sampling only

Geophysical testing and ground water sampling

USGS to Determine Source of High Uranium Upgradient of Site

- Is it natural?
- Is it from upgradient mine water discharges?
- Is it from Homestake?

EPA Groundwater Assessment

Geophysical Investigations

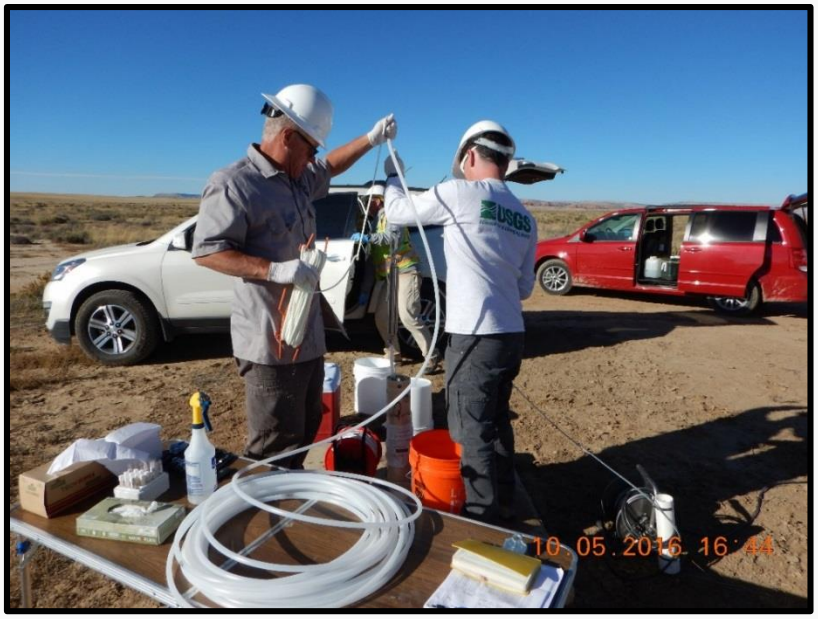
- Borehole Geophysical Logs, Including
  - Natural Gamma Log
  - Fluid Resistivity
  - Spectral Gamma Log
  - Flowmeter Log

Geochemical and Isotopic Analysis

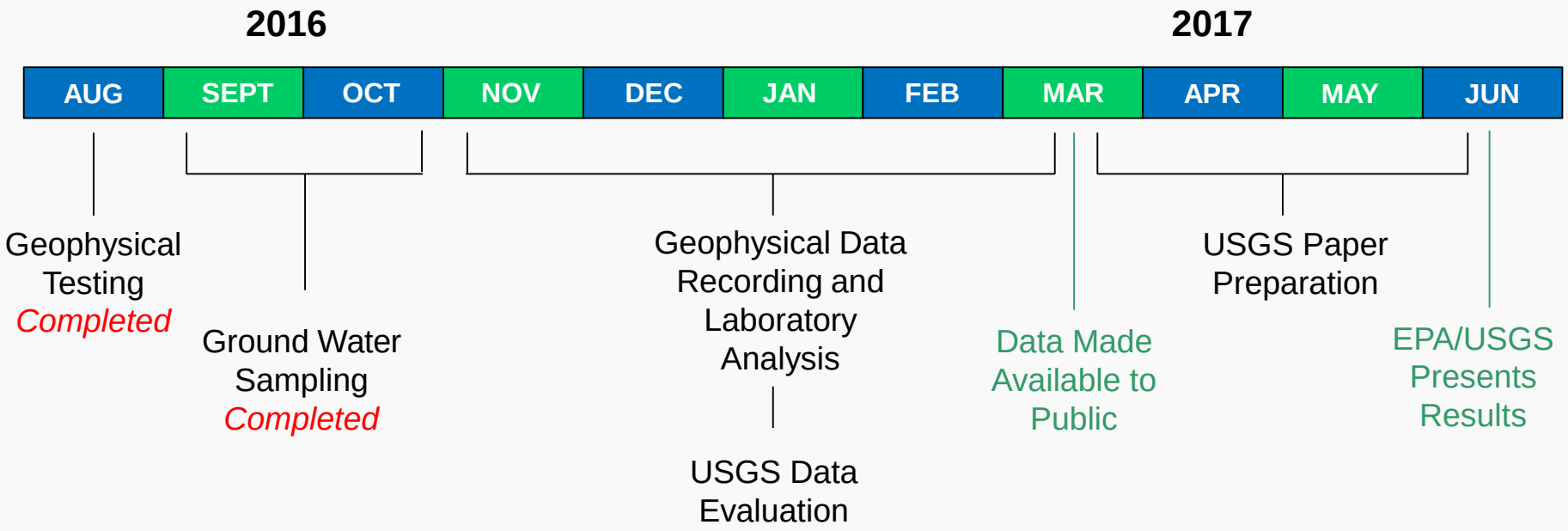
- Gross Alpha
- Radium Isotopes
- Uranium, Sulfer, and Nitrogen Isotopes
- Dissolved Gases
- Ground Water Recharge Ages Using Chlorofluorocarbon (CFCs)

GEOPHYSICAL INVESTIGATION

GROUNDWATER SAMPLING



Ground Water Assessment Schedule



Fourth Five-Year Review

- Conducted from Dec 2015 - Sept 2016
- Purpose
  - Determine if cleanup protective
  - Identify any issues
  - Make recommendations to address issues
- Community members interviewed in Jan 2015

Results of Five-Year Review

- Remedy is **currently protective** in short-term
- For long-term protection, additional work needs to be completed
- Fact Sheet provides more information
- Full Report available on EPA webpage for Homestake

Questions